

# Postdoc Position: MD simulations of G protein coupled receptors

## Job Description

The Charité Universitätsmedizin Berlin is a large teaching hospital in Berlin, affiliated with both Humboldt University and Freie Universität Berlin. With numerous Collaborative Research Centers (CRC) of the Deutsche Forschungsgemeinschaft, the Charité is one of Germany's most research-intensive medical institutions. The ProteinFormatics laboratory in Berlin, located at the Campus Charité Mitte, offers an international and stimulating environment for research in molecular structural biology. One of the key areas of biomedical and pharmaceutical research is the investigation of structural specificity and functional selectivity of G protein coupled receptors (GPCRs). In close collaboration with experts working with complementary experimental methods in Berlin, Stanford University and University of Copenhagen we are using molecular dynamics simulations to investigate structural and functional properties of GPCRs. A highly motivated and experienced researcher is sought to contribute to the group's efforts in this area of research.

The successful applicant will be involved in set up and analysis of classical and umbrella sampling MD simulations of GPCRs. The PostDoc position will be settled in the CRC740/SFB740, which offers the opportunities for new collaborations, in particular those related to additional computational techniques and experimental work supporting this.

## Qualifications and Experience

The candidate should have a PhD degree in a relevant field and extensive experience in setup and analysis of molecular dynamics simulations. Excellent communication and presentation skills and the ability to work in an international environment are expected. Expertise in GPCR related research and conformational sampling techniques would be considered a bonus. Familiarity with scientific programming would be considered an advantage.

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